

Pushing the Envelope			
2003 Mathematics			
Course of Study			
Alabama Mathematics			
Grade 5			
Activity/Lesson	State	Standards	
History of Aviation Propulsion (pgs. 5-9)	AL	MA.5.3.1	Solve word problems that involve decimals, fractions, or money: Solving word problems involving elapsed time
Pushing the Envelope			
2003 Mathematics			
Course of Study			
Alabama Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	AL	MA.7.4.2	Express a pattern shown in a table, graph, or chart as an algebraic equation: Determining if a constant rate of change exists in a pattern
Physics and Math (pgs. 43-63)	AL	MA.7.5.1	Translate verbal phrases into algebraic expressions and algebraic expressions into verbal phrases: Exhibiting understanding of a variable as an unknown quantity
Physics and Math (pgs. 43-63)	AL	MA.7.6.1	Solve one- and two-step equations: Solving inequalities in one variable
Pushing the Envelope			
2003 Mathematics			
Course of Study			
Alabama Mathematics			
Grade 8			
Activity/Lesson	State	Standards	
Types of Engines (pgs. 11-23)	AL	MA.8.3.1	Use order of operations to evaluate and simplify algebraic expressions: Applying the substitution principle
Chemistry (pgs. 25-41)	AL	MA.8.3.1	Use order of operations to evaluate and simplify algebraic expressions: Applying the substitution principle
Chemistry (pgs. 25-41)	AL	MA.8.11.1	Determine the surface area and volume of rectangular prisms, cylinders, and pyramids: Estimating surface area and volume of solid figures
Chemistry (pgs. 25-41)	AL	MA.8.11.2	Determine the surface area and volume of rectangular prisms, cylinders, and pyramids: Determining the appropriate units of measure to describe surface area and volume
Physics and Math (pgs. 43-63)	AL	MA.8.3.1	Use order of operations to evaluate and simplify algebraic expressions: Applying the substitution principle
Physics and Math (pgs. 43-63)	AL	MA.8.4.3	Graph linear relations by plotting points or by using the slope and y-intercept: Exhibiting conceptual understanding of various uses of variables

Pushing the Envelope			
2003 Mathematics			
Course of Study			
Alabama Mathematics			
Grades 9-12 (Algebra I)			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	AL	MA.9-12.11.1	Solve problems algebraically that involve area and perimeter of a polygon, area and circumference of a circle, and volume and surface area of right circular cylinders or right rectangular prisms: Applying formulas to solve word problems